



Certificate Number: Q10561



Certificate Number: E17276

D3SBA10 ~ D3SBA80

SILICON BRIDGE RECTIFIER

PRV : 100 ~ 800 Volts

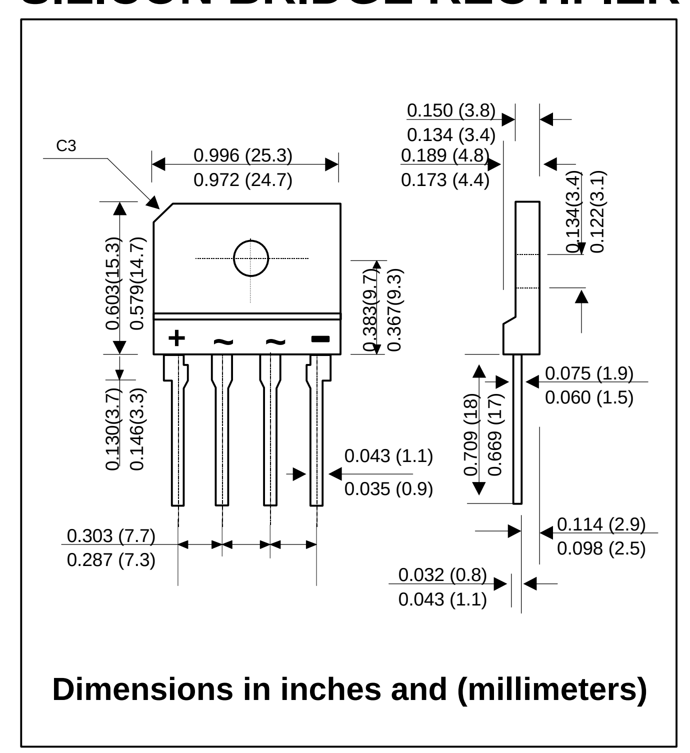
Io : 4.0 Amperes

FEATURES :

* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Ideal for printed circuit board
* Very good heat dissipation
* Pb / RoHS Free

MECHANICAL DATA :

* Case : Reliable low cost construction utilizing molded plastic technique
* Epoxy : UL94V-O rate flame retardant
* Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Polarity symbols marked on case
* Mounting position : Any
* Weight : 4.28 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	D3SBA 10	D3SBA 20	D3SBA 40	D3SBA 60	D3SBA 80	UNIT
Maximum Reverse Voltage	V_{RM}	100	200	400	600	800	V
Maximum Average Forward Current (50Hz Sine wave, R-load)	$I_{F(AV)}$	4 (With heatsink, Tc = 108°C) 2.3 (Without heatsink, Ta = 25°C)					A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sinwave, Single Shot)	I_{FSM}	80					A
Current Squared Time at 1ms ≤ t < 10 ms, Tc=25°C	I^2t	32					A^2S
Maximum Forward Voltage per Diode at I_F = 2.0 A.	V_F	1.05					V
Maximum DC Reverse Current, V_R=V_{RM} (Pulse measurement, Rating of per diode)	I_R	10					µA
Maximum Thermal Resistance, Junction to case	RθJC	5.5 (With heatsink)					°C/W
Maximum Thermal Resistance, Junction to Ambient	RθJA	30 (Without heatsink)					°C/W
Operating Junction Temperature Range	T_J	150					°C
Storage Temperature Range	T_{STG}	- 40 to + 150					°C

Rev. 02 : March 25, 2005






RATING AND CHARACTERISTIC CURVES (D3SBA10 ~ D3SBA80)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

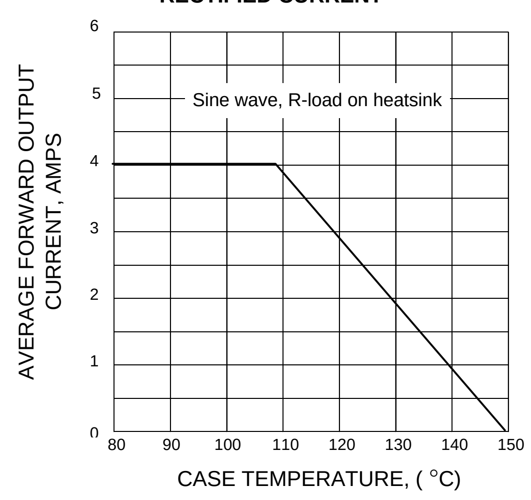


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

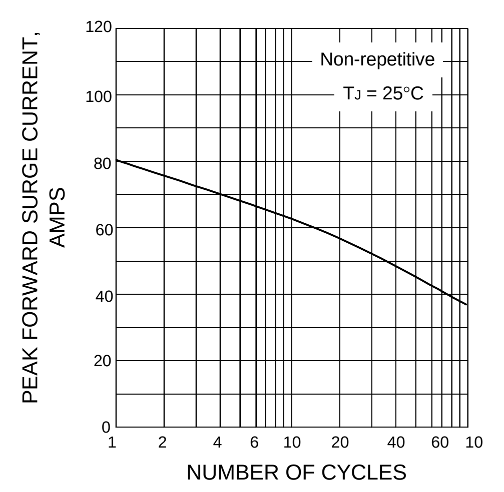


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

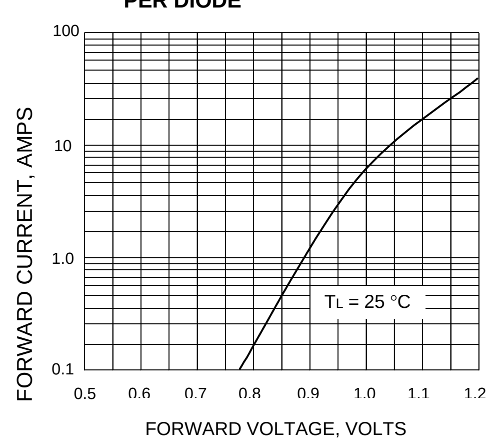


FIG.4 - POWER DISSIPATION

